APPENDIX 4 MSCP Table 3-5

Table 3-5

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME
COMMON NAME
STATUS (Federal/State)1

CONSERVED²
(BASED ON THE MSCP PLAN)

POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN) GENERAL BASIS FOR ANALYSIS OF COVERAGE

MONITORING
METHOD(S)
(MONITORING PLAN AND/OR
MANAGEMENT PLANS/

DIRECTIVES)

FEDERAL TAKE AUTHORIZATION STANDARDS

MEETS STATE &

PLANTS					
Acanthomintha ilicifolia	85% of 8 major	15% of major	Site-specific preserve	Monitoring Plan - Site	YES
San Diego thorn-mint	populations	populations	design and special	Specific (4 populations) and	
PE/CE			measures/management	Management	
				Plans/Directives	

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because all major populations are within the MHPA, and each of the eight major populations will be conserved from 80-100%, with 85% conserved overall. This species is on the list of narrow endemics³ which requires jurisdictions to specify and implement measures in their subarea plans to avoid or minimize impacts to all populations (including Asphalt Inc., Sky Mesa, El Capitan sites) during project design.

Notes: This species occurs on clay and gabbro soils which will be conserved at >28% and >43%, respectively.

Conditions: Area-specific management directives and the SPA for the Otay Lakes Resort area must include specific measures to protect against detrimental edge effects from the surrounding development.⁴

Agave shawii Shaw's agave FSC*/ I00% of major populations	No major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES
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DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because all known extant populations are within protected public land (Torrey Pines State Reserve and Border Field State Park). This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their subarea plans additional specific conservation measures for the species.³

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME
COMMON NAME
STATUS (Federal/State)

CONSERVED² (BASED ON THE MSCP PLAN)

POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)

GENERAL BASIS FOR ANALYSIS OF COVERAGE MONITORING
METHOD(S)
(MONITORING PLAN AND/OR
MANAGEMENT PLANS/
DIRECTIVES)

MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS

Notes: Additional important populations are found on military lands (Pt. Loma) which are not part of the MSCP. Populations at Pt. Loma are not part of the MSCP but will be conserved at a minimum of 91% in the Pt. Loma Ecological Reserve Area.

Conditions: Area-specific management directives must include specific measures to protect against detrimental edge effects.⁴

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DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered because 90% of the only major population in the MSCP will be conserved, and the adjoining population at the radio tower site will be 100% conserved. This major population occurs on public lands in the Mission Trails Regional Park. This species is on the MSCP's list of narrow endemics, and therefore participating jurisdictions must specify in their subarea plans additional specific conservation measures for the species.³

Notes: Occurrences thought to be *Ambrosia pumila* in Spring Canyon, Otay Mesa (east of Otay Lakes), Otay Valley (along the Otay River), and Hidden Trails were misidentified and are now known to be a common species of *Ambrosia*. The small population within the San Diego National Wildlife Refuge (Rancho San Diego) will also be conserved and managed by the USFWS.

3-33

Conditions: If more than 10% of the population at the Mission Trails Regional Park is impacted, this species will no longer be a covered species. Area-specific management directives must include monitoring of transplanted populations and specific measures to protect against detrimental edge effects.⁴

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSER VED ² (BASED ON THE MSCP PLAN)	POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)	GENERAL BASIS FOR ANALYSIS OF COVERAGE	MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES)	MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS	
Aphanisma blitoides Aphanisma FSC*/	90% of potential habitat (261± acres) - 92% of southern foredunes (123± acres), 88% of southern coastal bluff scrub (138± acres)	10% of potential habitat (28± acres) - 8% of southern foredunes (9± acres), 12% of southern coastal bluff scrub (17± acres)	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Habitat Based and Incidental	YES	
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED This species will be covered by the MSCP because 90% of its potential habitat will be conserved.						

Notes: Additional potential habitat occurs on military lands (Silver Strand, Imperial Beach) which are not a part of the MSCP. There are no known populations of this species in the MSCP Plan area.

Arctostaphylos glandulosa var.	91% of major	9% of major	Preserve design/landscape	Monitoring Plan - Site	YES
crassifolia	populations and 67%	populations	level with site-specific	Specific	
Del Mar manzanita	of southern maritime		consideration(s)/		
FE/	chaparral habitat		management		

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 91% of the major populations will be conserved and 67% of the habitat for the species will be conserved. This species is a Group A species in the County's proposed BMO.5

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

GENERAL BASIS FOR

MONITORING

POTENTIALLY

COMMON NAME STATUS (Federal/State) ¹	(BASED ON THE MSCP PLAN)	IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)	ANALYSIS OF COVERAGE	METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES)	FEDERAL TAKE AUTHORIZATION STANDARDS
Notes: Within the County, this preserve, these areas will not li		stern portion of the Metro	-Lakeside-Jamul segment, primari	ly in open space areas. Although	i not dedicated to the
Conditions: Area-specific mannisk of catastrophic fire. 4 Mana	agement directives must agement measures to acco	include specific managen omplish this may include p	nent measures to address the auteco prescribed fire.	ology and natural history of the s	pecies and to reduce the
Arctostaphylos otayensis Otay manzanita FSC*/	95% of major populations	5% of major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based and Photo Plot	YES
Ranch, Jamul Mountain, and Sanotes: This species is often as Conditions: Area-specific man	the MSCP because 95% an Miguel Mountain. The sociated with metavolcar agement directives must	of the major populations is species is a Group A spuic soils of which 34,000 a include specific managem	are located on BLM land and in the lecies in the County's proposed BM acres are included within the MHP and the measures to promote germinatish this may include prescribed fire	IO. ⁵ A. ion of seeds, maintenance of div	
Astragalus deanei Dean's milk vetch FSC*/		Unknown conservation	level and therefore not covered by	the plan.	NO

SCIENTIFIC NAME

CONSERVED²

MEETS STATE &

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (BASED ON THE MSCP PLAN)	POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)	GENERAL BASIS FOR ANALYSIS OF COVERAGE	MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES)	MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS
Astragalus tener var. titi Coastal dunes milk vetch PE/CE	92% of southern foredunes (123± acres)	8% of southern foredunes (11± acres)	Preserve design/landscape level	Monitoring Plan - Habitat Based and Incidental	YES
DETAILS OF RATIONALE FO	the MSCP because 92%	of the vegetative community			
Conditions: Area-specific man non-native species introductions					
Baccharis vanessae Encinitas baccharis FT/CE	92% of major populations	8% of major populations	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Site Specific (1 population) and Management Plans/ Directives	YES
DETAILS OF RATIONALE FO	R IDENTIFYING SPEC	CIES AS COVERED			•

This species will be covered by the MSCP because 92% of major populations will be conserved. This species is on the MSCP's list of narrow endemics, and therefore participating jurisdictions must specify in their subarea plans additional specific conservation measures for the species.³

Conditions: Based on BMPs, area-specific management directives must include specific management measures to address the autecology and natural history of the species, measures to reduce the risk of catastrophic fire, and appropriate male/female plant ratios. 4 Management measures to accomplish this may include prescribed fire.

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME
COMMON NAME
STATUS (Federal/State) ¹

CONSERVED²
(BASED ON THE MSCP PLAN)

POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE

MSCP PLAN)

GENERAL BASIS FOR ANALYSIS OF COVERAGE

MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES) MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS

Berberis nevinii Nevin's barberry PE/CE	100% of populations (occurrences are all persisting cultivars)	No natural populations present	Site-specific preserve design and special measures/management	Monitoring Plan - Habitat Based	YES

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because persisting cultivars occurring in Spring Valley and Torrey Pines State Reserve will be conserved. This species is on the MSCP's list of narrow endemics, and therefore participating jurisdictions must specify in their subarea plans additional specific conservation measures for the species.³

Notes: As no known natural populations occur within the plan area, development covered by the plan will not impact the species. Persistence of naturally occurring populations in San Diego County is dependent on conservation efforts outside the MSCP area.

Brodiaea filifolia Thread-leaved brodiaea	88% of vernal pool habitat, 38% of	12% of vernal pool habitat may be	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES
PT/CE	grassland	impacted, but this habitat is subject to no			
		net loss of function and value and 404(b)1			
		guidelines			

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 88% of the vernal pool habitat and 38% of grassland habitat that are potential habitat for this species will be conserved. This species is on the MSCP's list of narrow endemics, and therefore participating jurisdictions must specify in their subarea plans additional specific conservation measures for the species if a population is identified in the future.³

Notes: This species is not known to occur within the MSCP area.

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSER VED ² (BASED ON THE MSCP PLAN)	POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)	GENERAL BASIS FOR ANALYSIS OF COVERAGE	MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES)	MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS
Brodiaea orcuttii Orcutt's brodiaea FSC*/	All major populations in MSCP area, 88% of vernal pool habitat, 38% of grassland	12% of vernal pool habitat may be impacted, but this habitat is subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Site Specific (4 populations) and Management Plans/ Directives	YES
County's proposed BMO. ⁵ Notes: Three major populations federal wetland regulations will	the MSCP because all of the soccur on Miramar military provide additional habitate population is identified as	ne major populations in the lands which are not part o protection resulting in no nacritical population in the	f the MSCP. Participating juris et loss of wetlands.	s) will be conserved. This is a G dictions' guidelines and ordinan at be 100% conserved. Area-spe	ces and state and
Calamagrostis densa Dense reed grass none	91% of major populations	9% of major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State)¹ CONSERVED²
(BASED ON THE MSCP PLAN)

POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)

GENERAL BASIS FOR ANALYSIS OF COVERAGE MONITORING
METHOD(S)
(MONITORING PLAN AND/OR
MANAGEMENT PLANS/
DIRECTIVES)

MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 91% of major populations will be conserved.

Notes: Taxonomic reclassification has combined this taxon in a more common taxon (Calamagrostis koelerioides) which is widespread.

Conditions: Trail maintenance/placement to avoid human impacts must be addressed in area-specific management directives.⁴ Enhancement opportunities using prescribed fire should be evaluated in management plans. Area-specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire.⁴

Calochortus dunnii	100% of major	No major populations	Preserve design/landscape	Monitoring Plan - Habitat YES
Dunn's mariposa lily	populations		level with site-specific	Based and Photo Plot and
FSC*/CR			consideration(s)/	Management Plans/
			management	Directives

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 100% of the major populations will be conserved. This species is on the MSCP's list of narrow endemics, and therefore participating jurisdictions must specify in their subarea plans additional specific conservation measures' for the species if a population is identified in the future.

Notes: Fifty-two percent of one of the three major populations occurs within a major amendment area in the Otay Mountain area. (Take authorization amendments will be subject to public review through CEQA and NEPA processes and require approval by CDFG and USFWS.) This species occurs on gabbro and metavolcanic soils, and >43% of the gabbro soils in the MSCP Plan area are within the MHPA.

Conditions: At the time permit amendments are proposed, strategies to provide protection for this species within the amendment area must be included.

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSER VED ² (BASED ON THE MSCP PLAN)	POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)	GENERAL BASIS FOR ANALYSIS OF COVERAGE	MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES)	MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS
Caulanthus stenocarpus Slender-pod jewelflower FSC*/CR	75% of major populations	25% of major populations	Site-specific preserve design and special measures/management	Monitoring Plan - Habitat Based and Incidental and Management Plans/ Directives	YES
	y the MSCP because 3 of	4 (75%) of the major popul	lations and 89% of occurrences v		anyon, Poway/Sanrex,

Note: This taxon has been combined with the more widespread and common Cautanthus heterophyllus var. heterophyllus.

Conditions: Area-specific management directives must include specific management measures to address the antecology and natural history of the species and to reduce the risk of catastrophic fire.⁴ Management measures to accomplish this may include prescribed fire.

Ceanothus cyaneus Lakeside ceanothus FSC*/ 75% of major populations	25% of major populations	Site-specific preserve design and special measures/management	Monitoring Plan - Habitat Based and Photo Plot	YES
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DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 3 of 4 (75%) of the major populations will be conserved. This species is on the MSCP's list of narrow endemics, and therefore participating jurisdictions must specify in their subarea plans additional specific conservation measures³ for the species if a population is identified in the future. This is a Group A species in the County's proposed BMO.⁵

Conditions: Area-specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire.

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

Site-specific preserve

measures/management

design and special

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (BASED ON THE MSCP PLAN)	POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)	GENERAL BASIS FOR ANALYSIS OF COVERAGE	MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES)
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33% of major

known localities

populations, and 36% of

MANAGEMENT PLANS/ DIRECTIVES)	STANDARDS		
Monitoring Plan - Habitat Based and Photo Plot and	YES		
Management Plans/	1		

Directives

MEETS STATE &

FEDERAL TAKE

AUTHORIZATION

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

67% of major

populations, and

64% of known

localities

This species will be covered by the MSCP because 67% of the major populations will be conserved, and special management actions will increase populations. This is a Group B species in the County's proposed BMO.⁵

Notes: Additional important populations (30% of known populations) are found on military lands (Pt. Loma, Miramar) which are not part of the MSCP.

Conditions: Revegetation efforts within appropriate habitats must include restoration of this species. Area-specific management directives for the protected populations must include specific measures to increase populations, including specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Any newly found populations should be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.

Chorizanthe orcuttlana Orcutt's spineflower FE/CE		Unknown conservation level and therefore not covered by the Plan.					
Cordylanthus maritimus ssp. maritimus	100% of major populations	No major populations	Site-specific preserve design and special	Monitoring Plan - Site Specific (3 populations)	YES		
Salt marsh bird's-beak PE/CE			measures/management				

Ceanothus verrucosus

FSC*/

Wart-stemmed ceanothus

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME
COMMON NAME
STATUS (Federal/State) ¹

CONSERVED²
(BASED ON THE MSCP PLAN)

POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN) GENERAL BASIS FOR ANALYSIS OF COVERAGE MONITORING
METHOD(S)
(MONITORING PLAN AND/OR
MANAGEMENT PLANS/
DIRECTIVES)

MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 100% of major populations within the MSCP Plan area will be conserved.

Note: Participating jurisdictions' guidelines and ordinances and state and federal wetland regulations will provide additional protection. One population of this species also occurs on military lands (Naval Radar Receiving Facility) which are not part of the MSCP.

Conditions: Area-specific management directives must (1) include measures to reduce threats and stabilize populations (e.g., relocation of footpaths, establishment of buffer areas, etc.), (2) address opportunities for reintroduction, and (3) include measures to enhance existing populations (e.g., protect and improve upland habitat for pollinators). There is a federal recovery plan for this species, and management activities should help achieve the specified goals. Any newly found populations shall be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.

Cordylanthus orcuttianus Orcutt's bird's-beak FSC*/	75% of major populations	25% of major populations	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Site Specific (4 populations) and Management Plans/ Directives	YES
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DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 3 of 4 (75%) major populations will be conserved. A portion of the Otay River Valley population lies outside of the MHPA but will be subject to the County's Biological Mitigation Ordinance (80-100% conservation).⁵ The Otay Ranch population (southeast of Lower Otay Lake) is considered conserved subject to landowner and agency agreement.

Condition: At the time permit amendments are proposed, strategies to provide protection for this species within the amendment area must be included. (Take authorization amendments are subject to public review through CEQA and NEPA processes and require approval by CDFG and USFWS.)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (BASED ON THE MSCP PLAN)	POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)	GENERAL BASIS FOR ANALYSIS OF COVERAGE	MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES)	MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS
Corethrogyne filaginifolia var linifolia Del Mar Mesa sand aster FSC†/	48% of major populations, 57% of known localities, and 67% of southern maritime chaparral	52% of major populations, 43% of known localities, and 33% of southern maritime chaparral	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Site Specific	YES
This species will be covered by the Group A species in the County's policy. Notes: This taxon has been merginal Conditions: Area-specific managinal management of the complish this may include present the complish this may include present.	proposed BMO: ³ ed with two other <i>Coreth</i> gement directives for the peasures to address the au	<i>rogyne filaginifolia</i> varietie protected populations must	s and has been determined not include specific measures to pr	to meet the taxonomic standards	s for listing, ffects to this species,
Cupressus forbesii Tecate cypress FSC*/	98% Tecate cypress forest	2% Tecate cypress forest	Preserve design/landscape level	Monitoring Plan - Habitat Based and Photo Plot	YES
DETAILS OF RATIONALE FOR This species will be covered by the			conserved, primarily on lands a	dministered by BLM.	

include prescribed fire.

Conditions: Area-specific management directives for the protected populations will include specific measures to maintain or increase populations, including specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire.⁴ Management measures to accomplish this may

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (BASED ON THE MSCP PLAN)	POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)	GENERAL BASIS FOR ANALYSIS OF COVERAGE	MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES)	MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS
Dudleya blochmaniae ssp. brevifolia Short-leaved dudleya FSC†/CE	100% of major populations	No major populations	Site-specific preserve design and special measures/management	Monitoring Plan - Site Specific (3 populations) and Management Plans/ Directives	YBS
participating jurisdictions must Notes: The populations on Del University of California, San Di	the MSCP because 100% of specify in their subarea plates Mar Mesa, Carmel Mount ego to protect and manage agement directives must in	of major populations will book additional conservation ain, and Crestview Canyon the University of Californiclude (1) specific measure	nieasures for the species. ³ are subject to considerable ed a property adjacent to Skeleto	n the MSCP's list of narrow ender ge effects. The wildlife agencies n Canyon for this species. I edge effects to this species, (2) s	will work with the
Dudleya variegata Variegated dudleya FSC*/	56% of major populations, 75% of known localities	44% of major populations, 25% of known localities	Site-specific preserve design and special measures/management	Monitoring Plan - Site Specific (5 populations) and Management Plans/ Directives	YES

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME
COMMON NAME
STATUS (Federal/State)1

CONSERVED²
(BASED ON THE MSCP PLAN)

POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)

GENERAL BASIS FOR ANALYSIS OF COVERAGE MONITORING
METHOD(S)
(MONITORING PLAN AND/OR
MANAGEMENT PLANS/
DIRECTIVES)

MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 56% of major populations and 75% of known localities will be conserved. This species is on the MSCP's list of narrow endemics, and therefore participating jurisdictions must specify in their subarea plans additional conservation measures for the species.³

Conditions: Area-specific management directives must include species-specific monitoring and specific measures to protect against detrimental edge effects to this species, including effects caused by recreational activities. Some populations now occur within a major amendment area (Otay Mountain), and at the time permit amendments are proposed, strategies to provide protection for this species within the amendment area must be included. (Proposed take authorization amendments will have public review through CEQA and NEPA processes and require approval by CDFG and USFWS.)

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 100% of the only major population within the MSCP will be conserved.

Notes: Persistence of this species in San Diego County depends largely on conservation efforts in the MHCP and Camp Pendleton areas.

Conditions: Area-specific management directives must address specific measures to protect against detrimental edge effects.⁴

Ericameria palmeri ssp. palmeri Palmer's ericameria FSC*/	66% of major populations	34% of major populations	Site-specific preserve design and special measures/management	Monitoring Plan - Habitat Based and Photo Plot and Management Plans/ Directives	YES
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SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME
COMMON NAME
STATUS (Federal/State) ¹

CONSERVED² (BASED ON THE MSCP PLAN)

POTENTIALLY IMPACTED/ **DEVELOPED** (BASED ON THE MSCP PLAN)

GENERAL BASIS FOR **ANALYSIS OF**

METHOD(S) (MONITORING PLAN AND/OR **COVERAGE** MANAGEMENT PLANS/ DIRECTIVES)

MONITORING

FEDERAL TAKE **AUTHORIZATION STANDARDS**

MEETS STATE &

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 66% of major populations will be conserved. This species is on the MSCP's list of narrow endemics, and therefore participating jurisdictions must specify in their subarea plans additional conservation measures for the species.³

Notes: Impacts will be fully mitigated through avoidance, minimization, and compensation. Two of the six major populations are subject to potential impacts from proposed road widening projects (Jamacha Blvd., Highways 54/94).

82% of major	18% of major	Preserve design/landscape	Area-specific Management	YES
populations, 88% of	populations may be	level with site-specific	Directives (wetlands)	
vernal pool habitat	impacted, but vernal	consideration(s)/		
	pool habitat is subject to	management		
	no net loss of function			
	and value and 404(b)1			
	guidelines			
	populations, 88% of vernal pool habitat	populations, 88% of vernal pool habitat pool habitat pool habitat pool habitat is subject to no net loss of function and value and 404(b)1	populations, 88% of vernal pool habitat impacted, but vernal pool habitat is subject to no net loss of function and value and 404(b)1	populations, 88% of populations may be impacted, but vernal pool habitat is subject to no net loss of function and value and 404(b)1 populations may be inverted impacted, but vernal consideration(s)/ management populations may be inverted impacted, but vernal consideration(s)/ management populations may be inverted impacted, but vernal consideration(s)/ management

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 82% of major populations and 88% of vernal pool habitat will be conserved.

Notes: Additional important populations are found on military lands (Miramar) which are not part of the MSCP. Four populations (Proctor Valley, Otay River Valley, Del Mar Mesa, Spring Canyon) are likely to be subject to edge effects. This species has been added to the City of San Diego's list of narrow endemic species. Vernal pools that become part of the National Wildlife Refuge will be managed for the recovery of this species.

Conditions: Area-specific management directives must include specific measures to protect against detrimental edge effects.

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSER VED ² (BASED ON THE MSCP PLAN)	POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)	GENERAL BASIS FOR ANALYSIS OF COVERAGE	MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES)	MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS	
Erysimum ammophilum Coast wallflower FSC*/	92% of southern foredunes, 67% of southern maritime chaparral	8% of southern foredunes, 33% of southern maritime chaparral	Preserve design/landscape level	Monitoring Plan - Habitat Based and Incidental	YES	
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED This species will be covered by the MSCP because 92% of southern foredunes and 67% of southern maritime chaparral vegetation communities (that are potential habitat for this species) will be conserved. Notes: Populations from San Diego County are now being treated as Erysimum capitatum ssp. capitatum, a common species of wallflower.						
Ferocactus viridescens San Diego barrel cactus FSC*/	81% of major populations	19% of major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based and Photo Plot	YES	
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED						

This species will be covered by the MSCP because 81% of major populations will be conserved. This is a Group B species in the County's proposed BMO.5

Notes: This is an abundant species that will be protected at varying levels in several subareas: Carmel Mountain, 64%; East Elliott, 75%; Marron Valley, 90%; Mission Trails Regional Park, 94%; Otay Mesa, 70%; Otay River Valley, 100%; Sweetwater Reservoir, 100%; Sycamore Canyon-Fanita Ranch, 50%.

Conditions: Area-specific management directives must include measures to protect this species from edge effects and unauthorized collection; directives should also include appropriate fire management/control practices to protect against a too frequent fire cycle.

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State)¹

CONSERVED²
(BASED ON THE MSCP PLAN)

POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN) GENERAL BASIS FOR ANALYSIS OF COVERAGE MONITORING
METHOD(S)
(MONITORING PLAN AND/OR
MANAGEMENT PLANS/
DIRECTIVES)

MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS

Fremontodendron mexicanum Mexican flannelbush PE/CR	Insufficient distrib	NO			
Githopsis diffusa spp. filicaulis Mission Canyon bluecup FSC*/		NO			
Hemizonia conjugens Otay tarplant PE/CE	66% of major populations	34% of major populations	Site-specific preserve design and special measures/management	Monitoring Plan - Site Specific (5 populations) and Management Plans/ Directives	YES

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 66% of major populations will be conserved. This species is on the MSCP's list of narrow endemics, and therefore participating jurisdictions must specify in their subarea plans additional conservation measures for the species.³

Conditions: MSCP coverage of this species requires avoidance of populations in the Otay River Valley through sensitive design and development of the active recreation areas as described in the Otay Ranch RMP and GDP. One of the seven major populations occurs within an amendment area (Proctor Valley). At the time permit amendments are proposed, strategies to provide protection for this species within the amendment area must be included (proposed take authorization amendments will be subject to public review through CEQA and NEPA processes, and take authorization amendments require approval by CDFG and USFWS). Area-specific management directives must include specific measures for monitoring of populations, adaptive management of preserves (taking into consideration the extreme population fluctuations from year to year), and specific measures to protect against detrimental edge effects to this species.

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSER VED ² (BASED ON THE MSCP PLAN)	POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN)	GENERAL BASIS FOR ANALYSIS OF COVERAGE	MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES)	MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS
Hemizonia floribunda Tecate tarplant FSC*/		Unknown conservation le	vels and therefore not covered by	the Plan.	NO
Lepechinia cardiophylla Heart-leaved pitcher sage FSC*/	85% of major populations	15% of major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based and Photo Plot	YES
other three major populations BMO (Group A species). ⁵ Conditions: Area-specific ma	y the MSCP because 85% fall within the County's ar magement directives must c management measures to	of major populations will be a of undetermined developed include: (1) specific measure address the autecology an	pe conserved. The Iron Mountain pinent status and will receive 80- nres to protect against detrimental dinatural history of the species and	100% conservation based on the ledge effects; (2) specific measu	County's proposed
Lepechinia ganderi Gander's pitcher sage FSC*/	All known locations	No known locations	Preserve design/landscape level with site-specific consideration(s)/	Monitoring Plan - Habitat Based and Photo Plot and Management Plans/	YES

management

Directives

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State)¹ CONSER VED²
(BASED ON THE MSCP PLAN)

POTENTIALLY IMPACTED/ DEVELOPED (BASED ON THE MSCP PLAN) GENERAL BASIS FOR ANALYSIS OF COVERAGE MONITORING METHOD(S) (MONITORING PLAN AND/OR MANAGEMENT PLANS/ DIRECTIVES) MEETS STATE & FEDERAL TAKE AUTHORIZATION STANDARDS

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 100% of the known locations will be conserved. This species is on the MSCP's list of narrow endemics, and therefore participating jurisdictions must specify in their subarea plans additional conservation measures for the species.³

Conditions: Area-specific management directives must include: (1) specific measures to protect against detrimental edge effects and uncontrolled access; (2) measures to promote the increase of populations; and (3) specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire (management measures to accomplish this may include prescribed fire).⁴ One of the five major populations occurs within a major amendment area (Otay Mountain). At the time permit amendments are proposed, strategies to provide protection for this species within the amendment area must be included (proposed take authorization amendments are subject to public review through CEQA and NEPA processes and require approval by CDFG and USFWS).

Lotus nuttallianus Nuttall's lotus FSC*/	80-100% of major populations; 92% of southern foredune habitat	0-20% of major populations; 8% of southern foredune habitat	Preserve design/landscape level	Monitoring Plan - Site Specific (1 population)	YES
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DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 80-100% of the major populations will be conserved and 92% of the habitat (southern foredunes) will be conserved.

Notes: Additional important populations are found on military lands (Imperial Beach, Silver Strand) which are not part of the MSCP. The USFWS is currently working with the Navy to provide protection for this species on Silver Strand.

Conditions: Area-specific management directives must include specific measures to protect against detrimental edge effects.⁴